

SOFFIT STRUCTURE

FIELD OF THE INVENTION

The present invention relates to a soffit structure and more particularly, relates to a novel soffit structure having vent means therein.

BACKGROUND OF THE INVENTION

The use of soffit structures to provide ventilation to an attic or under the roof area is well known in the art. Thus, it has been known for years that ventilation of a space underneath a roof is necessary both during the summer and winter seasons. During the summer, if this area is not ventilated, the solar energy captured by the roof would generate excessive temperatures in the space. This will cause damage to many roofing materials and as well, would increase air-conditioning cost for the area below.

In winter, it is also required to ventilate the area since warm moist air escaping from heated areas below would, upon contact with the cold structural members, condense. This moisture would eventually lead to structural damage of wood components and can also cause dripping into the area below.

Generally, the area to be ventilated will comprise two different types of areas. Thus, in many sloping roof arrangements, there is provided a substantial open area, commonly called an attic, between the ceiling of the structure and the roof. In such an arrangement, different types of venting may be provided. One arrangement provides for a continuous vent along the ridge of the roof in conjunction with soffit vents. This is ideally arranged to create an air flow from the soffit through the ridge vent. Alternatively, various other types of vents may be provided in the end walls of the attic or in the roof

itself. In all instances, the purpose is to provide a controlled airflow through the attic area.

In the case of cathedral ceilings, the airflow is typically between the rafters, extending from the soffit to an upper vent.

Generally soffits comprise a piece of sheet metal or other material through which apertures have been formed. While such soffits are widely accepted, they can, under certain conditions, permit the flow of precipitation upwardly through the apertures. Furthermore, the aesthetic appeal of such soffits is limited.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide a soffit structure which is both aesthetically attractive and overcomes the disadvantages of the prior art.

According to one aspect of the present invention, there is provided a soffit structure comprising a sheet member having an upper surface and a bottom surface wherein the upper surface is designed to lie against a structural member of a building and the bottom surface is facing exteriorly of the building, a plurality of channels formed in the sheet member, the channels extending inwardly from the bottom surface, at least one of the channels having a pair of opposed side walls, the at least one channel having a plurality of apertures formed in at least one of the side walls thereof.

The soffit system of the present invention may be used in any suitable building structure with residential housing being the most common type of building structure which uses soffit ventilation. The soffit is traditionally manufactured of a formed metal although it is also known in the art to use plastic soffit. It suffices to say that

any suitable material may be utilized in the practice of the present invention.

The channels are formed in the soffit by any suitable means, depending upon the material. Thus, using a metallic material such as aluminum, known forming equipment can easily form the channels. The channels preferably have a generally U-shaped configuration although it is even more preferred that the walls of the channels be angled such that they form an angle of between 75° and 88° with respect to the upper surface of the soffit. In other words, the base of the channel is slightly larger than the opening.

In the preferred embodiment, all the channels are provided with apertures although it will be understood that only some of the channels may be provided with the apertures depending upon the degree of ventilation required. Similarly, it is preferred that the apertures be formed in both side walls of the recess. However, it will again be understood that only one of the walls may be provided with such apertures.

Preferably, the apertures are sufficiently numerous and are of a size to meet the ventilation standards set in the building industry. Such standards are well known in the art. Generally, the apertures would arrange between 12 and 16 mm. The number of rows in each standard piece will vary depending upon the ventilation required.

BRIEF DESCRIPTION OF THE DRAWINGS

Having thus generally described the invention, reference will be made to the accompanying drawings illustrating an embodiment thereof, in which:

Figure 1 is a perspective view of a portion of a soffit structure according to one

embodiment of the present invention;

Figure 2 is a side elevational view thereof; and

Figure 3 is a perspective view illustrating the soffit when used in a facia system.

Referring to the figures in greater detail and by reference characters thereto, there is illustrated a soffit structure which is generally designated by reference numeral 10.

Soffit structure 10 has a generally planar body 12 which has an upper surface 14 and a bottom surface 16. Formed in generally planar central body portion 12 are a plurality of generally U-shaped channels generally designated by reference numeral 18.

Each channel 18, in the illustrated embodiment, has a pair of opposed side walls 20, 22 which are connected by a bottom wall 24. As may best seen in Figure 2, each side wall 20 and 22 is angled slightly so as to form an angle of approximately 85° between upper surface 12 and a respective side wall as indicated by angle 26.

In order to provide the ventilation, apertures 28 are provided in each of the walls 20 and 22.

In use, the soffit may be attached by conventional means such as mechanical fasteners or the like. However, it is preferred that the same be used in a system wherein it is supported at one edge by a facia support member 30 and a second support member 32 which is secured to the wall structure of the building.

It will be understood that the above described embodiment is for purposes of illustration only and that changes and modifications may be made thereto without

departing from the spirit and scope of the invention.